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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/666,032	09/18/2003	Eric Lawrence Barsness	ROC920030264US1	7940

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EXAMINER
MITCHELL, JASON D

ART UNIT	PAPER NUMBER
2193	

DATE MAILED: 08/24/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *18 September 2003*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-29* is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-29* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *18 September 2003* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☒ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
    Paper No(s)/Mail Date _____.

4)☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____ .

5)☐ Notice of Informal Patent Application (PTO-152)

6)☐ Other: _____.

DETAILED ACTION

This action is in response to an application filed 9/18/03.

Claims 1-29 are pending in this application.

Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:

> Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 19 and 21-29 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

Claims 19 and 21-29 recite "A program product comprising ... computer-readable signal bearing media." Pg. 10, lines 8-10 of the instant application discloses "Examples of suitable computer-readable signal bearing media include: ... transmission type media such as digital and analog communication links". Such communication links or 'signal' claims are ineligible for patent protection because they do not fall within any of the four statutory classes defined under 35 USC 101.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-7, 9-16, 18-20, 22-27 and 29 are rejected under 35 U.S.C. 102(b) as being

anticipated by "Global Events and Global Breakpoints in Distributed Systems" by

Haban and Weigel (Haban).

Regarding Claim 1: Haban discloses:

An apparatus comprising: at least one processor; a memory coupled to the at least one

processor; a first job residing in the memory and executed by the at least one

processor; a second job residing in the memory and executed by the at least one

processor;

"multiple process running on multiple processors" (see pg. 166, col. 1, par. 2)

an inter-job breakpoint mechanism that detects at least one condition in the first job and,

in response thereto, performs at least one action on the second job.

"If a global event occurs ... the distributed system is halted" (see pg. 166, col. 2, par. 1)

Regarding Claim 10: Haban discloses:

A method for debugging comprising the steps of: defining at least one condition in a first

job;

"We define an primitive event as a special condition that occurs during operation of a

process and that describes significant behavior of the execution or state of the process"

(see pg. 166, col. 2, par. 3)

defining at least one action to take on a second job;

"If a global event occurs ... the distributed system is halted" (see pg. 166, col. 2, par. 1)

monitoring execution of the first job; monitoring execution of the second job;

"monitoring all the simultaneous sequences of events" (see pg. 166, col. 2, par. 4)

and when the at least one condition in the first job is satisfied, performing the at least

one action on the second job.

"If a global event occurs ... the distributed system is halted" (see pg. 166, col. 2, par. 1)

Regarding Claim 19: Haban discloses:

A program product comprising: (A) an inter-job breakpoint mechanism that monitors

execution of first and second jobs, and when at least one condition in the first job is

satisfied, performs at least one action on the second job

"If a global event occurs ... the distributed system is halted" (see pg. 166, col. 2, par. 1)

(B) computer-readable signal bearing media bearing the inter-job breakpoint

mechanism.

"Each node ... with its own debugging process ... connected to a central test station"

(see pg. 172, col. 1, par. 2)

Regarding Claims 2, 11 and 22: The rejections of claims 1, 10 and 19 are

incorporated, respectively; further Haban discloses the at least one condition comprises

the start of execution of a specified portion of code in the first job (Table 1, "enter

procedure <blockID>").

Regarding Claims 3, 12 and 33: The rejections of claims 1, 10 and 19 are

incorporated, respectively; further Haban discloses the at least one condition comprises

the end of execution of a specified portion of code in the first job (Table 1, "leave

procedure <blockID>").

Regarding Claims 4, 13 and 24: The rejections of claims 1, 10 and 19 are

incorporated, respectively; further Haban discloses wherein the at least one action

comprises halting execution of the second job (pg. 166, col. 2, par. 1 "the distributed

system is halted").

Regarding Claims 5, 14 and 25 The rejections of claims 1, 10 and 19 are incorporated,

respectively; further Haban discloses wherein the at least one action comprises

enabling a breakpoint in the second job (pg. 168, col. 1, par. 2 "The happened-before

event, ... indicates that event Ge_1 happened before event Ge_2").

Regarding Claims 6, 15 and 26: The rejections of claims 5, 14 and 25 are

incorporated, respectively; further Haban discloses wherein the at least one action

further comprises halting execution of the second job when at least one condition

specified in the breakpoint in the second job is satisfied (pg. 167, col. 1, par. 3 "a

primitive event Pe is an event that describes the behavior of the execution or state of a

single process").

Regarding Claims 7, 16 and 27: The rejections of claims 1, 10 and 19 are

incorporated, respectively; further Haban discloses the at least one action comprises

modifying a property on the second job (pg. 173, col. 1, par. 3 "the test system may

dynamically ... change the interconnection structure of the processes").

Regarding Claims 9, 18 and 29: The rejections of claims 1, 10 and 19 are

incorporated, respectively; further Haban discloses the at least one action comprises

outputting of a debug message to the second job's output.

Regarding Claim 20: The rejection of claim 19 is incorporated; further Haban discloses

the computer-readable signal bearing media comprises recordable media (pg. 172, col.

1, par. 2 "Each node ... with its own debugging process ... connected to a central test station").

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 8, 17 and 28 are rejected under 35 U.S.C. 103(a) as being unpatentable over "Global Events and Global Breakpoints in Distributed Systems" by Haban and Weigel (Haban) in view of

Regarding Claims 8, 17 and 28: the rejection of claims 7, 16 and 27 are incorporated, respectively; further Haban does not explicitly disclose the property comprises a program variable. However the Haban does disclose his system performs inter-process debugging features (pg. 173, col. 1, par. 3 "In addition to sequential debugging feature, the test system may dynamically create messages")

Ur teaches "Debugging functions are well know in the art and include ... data manipulation (e.g. ... setting variable values)".

It would have been obvious to a person of ordinary skill in the art at the time of the invention to provide "sequential debugging features" (Haban pg. 173, col. 1, par. 3) such as "setting variable values" through the user of Haban's "dynamically created messages" (Haban pg. 173, col. 1, par. 3).

Claim 21 is rejected under 35 U.S.C. 103(a) as being unpatentable over "Global Events and Global Breakpoints in Distributed Systems" by Haban and Weigel (Haban) in view of Official Notice.

Regarding Claim 21: Haban dose not explicitly disclose the computer-readable signal bearing media comprises transmission media. However, Examiner notes that at the time of invention, it was common practice to distribute programs over transmission media (e.g. downloading). Further Applicant's disclosure on pg. 10, lines 3-10 ("Those skilled in the art will appreciate that [programs are] capable of being distributed as ... transmission type media such as digital and analog communication links") supports this assertion.

Double Patenting

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 1, 4, 10, 13, 19 and 24 are provisionally rejected on the ground of

nonstatutory obviousness-type double patenting as being unpatentable over

claims 1-2, 21-22, 42-43, 45, 48 and 66 of copending Application No. 10/153,978

(the '978 application). Although the conflicting claims are not identical, they are not

patentably distinct from each other because:

Claims 1, 10 and 19 of the instant application is anticipated by Claims 1 and 21,

42, 45 and 66, respectively of the '978 application.

The 'database' recited in the '978 application anticipates the first job of the instant claim,

and the computer program of the '978 application anticipates the second job.

Claim 4, 13, and 24 of the instant application is anticipated by claims 2 and 22, 43,

48 and of the '978 application.

This is a <u>provisional</u> obviousness-type double patenting rejection because the

conflicting claims have not in fact been patented.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's

disclosure.

Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Jason Mitchell whose telephone number is (571) 272-

3728. The examiner can normally be reached on Monday-Thursday and alternate

Fridays 7:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Kakali Chaki can be reached on (571) 272-3719. The fax phone number for

the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the

Patent Application Information Retrieval (PAIR) system. Status information for

published applications may be obtained from either Private PAIR or Public PAIR.

Status information for unpublished applications is available through Private PAIR only.

For more information about the PAIR system, see http://pair-direct.uspto.gov. Should

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system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Jason Mitchell
8/10/06
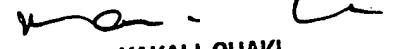
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